

QUICK DTSS OPERATOR'S MANUAL

Instructions before first start-up.

Read carefully completely OPERATOR'S MANUAL attached to the machine before starting to use.

Read and execute specific CALIBRATION INSTRUCTIONS FOR DTSS duster.

Instructions for daily use.

A) To start daily use

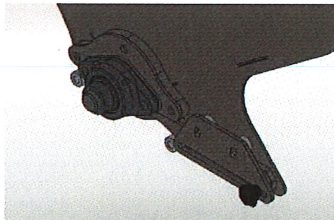
- A.1.- Lubricate bearings, PTO, and boom joints.
- A.2.- Visually revise there are no objects in the impeller's grill.
- A.3.- Visually check impeller is clean and in good conditions.
- A.4.- Check proper position of the hydraulic valve to calibrate auger RPM.
- A.5.- Visually check there are no strange objects in to the hopper.

B) To fill up the hopper

- B.1.- Turn off PTO and auger.
- B.2.- Close the hopper gate before fill it up.
- B.3.- Visually check there are no strange objects in to the hopper.
- B.4.- Fill up the hopper with sulfur.

C) To dust at field. Operate instructions in the following order.

- C.1.- Open gate once you are into dusting area.



- C.2.- Smoothly start tractor PTO and increase PTO turning speed up to a max of 540 rpm
- C.3.- Turn on hydraulic system to start auger turning.
- C.4.- Start to dust.
- C.5. Turn off smoothly tractor PTO at low tractor engine RPM every time you have to stop dusting operations.
- C.6.- Close hopper gate once it is empty or to move from field to field.

Instructions for DTE-100 & DTS-250 Duster Calibration

1- Determine by the following formula the lbs/min according to:

- **RATE** - Desired rate (Lbs / Acre)
- **WIDHT**- Row or bed width (feet)
- **N** – Number of rows or beds treated simultaneously
- **SPEED** – Advance Speed (m / h)

$$Lbs. min = \frac{RATE \times WIDHT \times N \times SPEED}{495}$$

Example:

- **RATE** – 30 lbs/Acre
- **WIDHT**- 11 feet
- **N** – 2 completely rows
- **SPEED** – 5,5 mph

$$Lbs. min = \frac{30 \times 11 \times 2 \times 5.5}{495} = 7,33 \text{ lbs/min}$$

2 – The following table shows the lever position needed according to the PTO rpm and the lbs/min obtained by the previous formula.

<i>Match the values in blue on the tables according to duster model and working RPM.</i>						
Lever position expected according dosage needed in lbs/min for DTS & DTE						
MODEL OF DUSTER	DTE			DTS		
PTO RPM	410	520	540	410	520	540
LEVER POSITION N°2	1,94	2,29	2,38	2,29	2,73	2,82
LEVER POSITION N°3	4,17	5,29	5,43	4,85	6,17	6,52
LEVER POSITION N°4	6,23	8,46	8,75	7,23	9,87	10,58
LEVER POSITION N°5	8,28	11,63	12,07	9,61	13,57	14,63
LEVER POSITION N°6	10,34	14,81	15,39	11,99	17,28	18,69
LEVER POSITION N°7	12,39	17,98	18,71	14,37	20,98	22,74
LEVER POSITION N°8	14,45	21,15	22,03	16,75	24,68	26,79

3 – Place the lever of the duster to the position obtained.



Important: Lever position expected for DTS/DTE is an approximate value, sulfur rate have to be checked doing a test outside plantation, not a proper dosage can cause important damage to crops.

Instructions for DTSS-660 Duster Calibration

1- Determine by the following formula the auger RPM according to:

- **RATE** - Desired rate (Lbs / Acre)
- **WIDHT**- Row or bed width (feet)
- **N** – Number of rows or beds treated simultaneously
- **SPEED** – Advance Speed (m / h)

$$AUGER\ RPM = \frac{RATE \times WIDHT \times N \times SPEED}{140}$$

Example:

- **RATE** – 30 lbs/Acre
- **WIDHT**- 11 feet
- **N** – 2 completely rows
- **SPEED** – 5, 5 mph

$$AUGER\ RPM = \frac{30 \times 11 \times 2 \times 5.5}{140} = 26\ RPM$$

2 – Make a mark in a visible place of the axis of the auger.

3 – With the hopper empty, set up the tractor engine to the expected RPM of work.

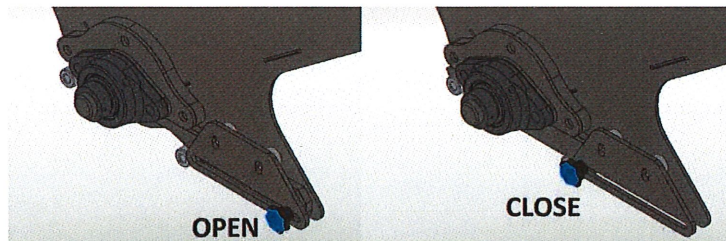
4 – Turn on the hydraulic circuit of the tractor to the regulation valve, with the valve open at the maximum.

5 – Slowly close the hydraulic regulator of the valve, which regulates the rpm of the auger, until you get the AUGER RPM obtained by the formula.

6 – **Do not close the gate of the hopper to regulate dust rate**, hopper gate have to be opened 100%, only is possible to close the gate to adjust dust rate in the following cases:

1 – Below 20 rpm auger obtained by the formula you can close the gate at a maximum of 25%, 75% open.

2 – Below 10 rpm auger obtained by the formula you can close the gate at a maximum of 50%, 50% open.



Important: Auger RPM expected for DTSS is an approximate value, sulfur rate have to be checked doing a test outside plantation, not a proper dosage can cause important damage to crops.